

Development of Paper Products to tackle Plastic Pollution

Abstract

The goal of this research is to motivate people to be eco-friendly in terms of plastic usage; by doing so, co-developing paper products with a company. We studied paper products by doing research and interview, then realized that there are obstacles of cost and demerit of paper, to change the product into paper material from plastic. Data from the survey showed that Paper packaging can also create a change in awareness of plastic issues. Although we failed to co-develop a paper-wrapped pocket tissue with Nippon Paper Group, we are currently working with Kawano and have found the supplier of paper material.

Introduction

Growing concern over Plastic Pollution

- Harming sea creature
- Huge amount of Plastic Garbage in the Ocean

150 million tons



Took several actions



- Clean the Ocean
- Inform in the school festival

Idea: Replace plastic products into paper products

Anticipated results: Increase of people taking action

Data: 58% of plastic waste in the ocean are plastic in daily life

Goal

Motivate people to take action and examine the effectiveness

Method

Study paper products

Create a sample

Survey

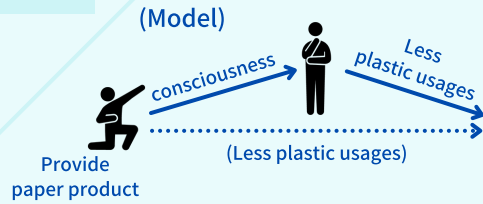
Analysis

Co-develop paper products

Read article of paper products
Interview the company



Pocket tissue with paper wrapping



Decrease on plastic waste

NIPPON PAPER GROUP

small smile factory
kawano

Online Meetings

Result

Co-Developing with Kawano

Study

Interview to KitKat

- **About Cost**
 - Change the machine and material
 - Increase less than ten times
 - Decrease when simplifying the production process
- **Disadvantage of Paper**
 - Fragile
 - Drench
 - Unhygienic
 - Pass through light and air
 - Difficult to improve wrinkle
- **Merit of Company**
 - Impact
 - Enterprise value
- **Advantage of Paper**
 - Easy to write
 - Able to fold
- **Trial**
 - Water resistant

Research

- Barrier/innovation/aqueous/heat-sealing paper are used as a material
- Japan's plastic packaging recycling system needs to be reviewed

Co-Development

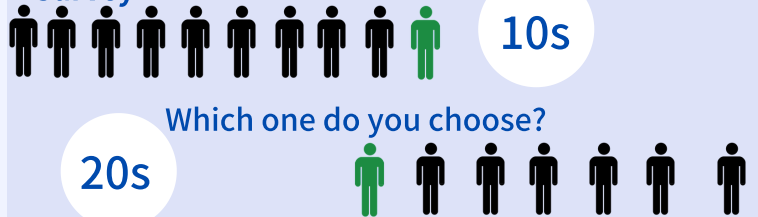
NIPPON PAPER GROUP

Failed...Cost

small smile factory
kawano

Developing...Find the supplier of paper material
Approach to the sponsor

Survey



step up

Stagnation

Analysis

- Most participants choice plastic products then paper one.
- using paper products lead to change awareness of plastic problems.

Conclusion

Paper products have possibility of increasing the awareness against the issue of plastic pollution. As a future prospects, we are going to progress the co-development of paper packed pocket tissue, and to clarify its effectiveness on the motivation of people.